

**UTAH DEPARTMENT OF HEALTH**  
**Statement on Whole-Body CT Screening Exams**  
**January 2003**

The Utah Department of Health does not recommend whole-body computed tomography (CT) screening for individuals without symptoms or suspicion of disease. Any presumed benefit of whole-body CT screening is currently uncertain and there is no evidence that such screening is cost efficient or effective in prolonging life.

According to the U.S. Preventive Services Task Force, a screening test must meet certain criteria in order to be considered effective. For example, the screening test must be able to detect the condition earlier than without screening and be accurate, that is, avoid producing large numbers of false-positive and false-negative results. In addition, screening for and treating individuals with early disease should improve the likelihood of favorable health outcomes as compared to treating patients after they show signs or symptoms of disease.

CT is a diagnostic imaging procedure that uses x-rays to obtain cross-sectional images of the body. CT has been recognized as a valuable tool to diagnose disease and plan, guide, and monitor therapy since its introduction in the mid-1970s. Scientific studies are underway to test the effectiveness of using CT to screen people for specific diseases. For example, clinical studies are underway to determine whether spiral CT might be a useful method to screen for lung cancer in smokers and if CT virtual colonoscopy is as good as colonoscopy in detecting colon cancer.

A new use of this technology, whole-body CT screening, is currently being marketed in the U.S. as a preventive measure to examine healthy individuals who have no symptoms or suspicion of disease. However, for a person without symptoms, this procedure is unlikely to discover serious disease and the potential harm to the individual may be greater than the presumed benefit.

These harms include unnecessary radiation exposure and the possibility of detecting findings that will not ultimately affect an individual's health but which could lead to unnecessary follow-up tests and treatments, all of which have their own risks. Whole-body CT screening is unlikely to benefit someone lacking signs or symptoms of a serious disease by detecting it early enough to treat it and alter the outcome significantly.

Personal testimonials about the life saving benefits of whole-body CT screening should be viewed with caution, as there are no independent studies available to determine how many of these patients would have had the same outcomes without this screening. Furthermore, the marketing of this procedure fails to provide information about individuals who underwent unnecessary follow-up procedures and who suffered pain or complications or incurred costs as a result.

To date, no randomized, controlled clinical trials of whole-body CT screening have been performed or published. The American College of Radiology, the American College of Cardiology/American Heart Association, and the American Association of Physicists in Medicine do not recommend whole-body CT screening of the general public and the Food and Drug Administration has never approved, cleared, or certified any CT system specifically for use in such screening.

Public health has a long history of conducting population-based screening of asymptomatic individuals, including routine screening of newborns for metabolic abnormalities and screening of asymptomatic persons at high risk for developing tuberculosis. The tests used for these activities meet established criteria for screening and have resulted in substantial improvement of health outcomes in this country.

However, there are currently no data demonstrating that whole-body CT screening of asymptomatic individuals is more likely to do good than harm. Given the present lack of evidence that this procedure is of any real value or benefit to the patient, the Department does not support whole-body CT screening. The Utah Department of Health will continue to monitor this issue.

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